

Rattlesnake Creek Partnership Meeting
January 27, 2009

9:30 AM Teleconference

Attendees: Dan Severson, Rachel Laubhan, Don Anderson, Carrie Cordova, Sharon Falk, Kent Askren, Meg Estep, Lisa Allen, Kent Lamb, John Janssen, Kevin Shultz, Darrell Wood, Dennis Dutton, Chris Beightel, Darci Paull, Tina Alder and Mike Lamb

Introductions

Darci Paull of DWR gave a general outline of key points of the 2000 Original Rattlesnake Creek Management Program. During this, upcoming topics of discussion were mentioned including:

- GMD5's recommendation of including surface water in water use analyses
- GMD5's recommendation of including MIA in Priority Area 7
- How to address the inclusion/exclusion of Mystery River Area

Powerpoint: Tina Alder of DWR presented a PowerPoint presentation of proposed adjustments to water use goals & calculations:

- Should the Mystery River Area be removed from the Groundwater Unit (Priority Areas 5+2)'s Authorized Quantity?
- Base Period Average Water Use: Should it be calculated as percentage (72%) of authorized quantity? Or should actual reported water use be used?
- Should the average water use goal be based on regression analysis or a percentage goal of actual water use?

After further discussion, it was decided by the Partnership that the goals of the 2000 Management Program shall be used until the GMD5 District-Wide Groundwater Model is completed and reviewed.

2008 Rattlesnake Creek Management Program Review Revisions: Lisa Allen of DWR discussed revisions to the 2008 Program since the last Partnership Meeting in December 2008 (See attachment Revisions).

GMD 5 asked whether USFWS knew how much water was saved from removing 60,000 trees on the refuge. They did not have an estimate.

A revised 2008 Management Program with today's revisions will be sent out to the partnership.

Revisions to 8-Year Review Report

Based on Partnership Discussions December 2008

Page # Edited Version, (Clean Version):

Page 3-4, (3-4): Re-organized the criteria so to match the format of the report to make it easier to follow

Changes satisfactory Yes ☐ No, if no, what additional changes are needed?

Include page numbers next to criteria and corresponding document section numbers

Page 4, (4): Added in the NCDC precipitation network used in the analysis and a map on page 5 of the locations of these stations.

Changes satisfactory ☒ Yes No, if no, what additional changes are needed?

Page 6 (6): Streamflow- Added in the original management program language and added

“As the data shows, the rolling 10-year average 25 cfs goal has been met from 2000 through 2008; however, a positive trend has not been evident for the past seven years. Figure 2 shows minimum average January streamflow requirements at the Zenith gage for the years 2009 through 2012 to allow the 25 cfs goal to continue being met.”

This was added based on comments that the goals and objectives have not been met to date.

Changes satisfactory Yes ☐ No, if no, what additional changes are needed?

Delete sentence “Figure 2 shows minimum average January streamflow requirements at the Zenith gage for the years 2009 through 2012 to allow the 25 cfs goal to continue being met.”

Page 7, (7): 10-year rolling average chart- added in what the minimum average streamflow at Zenith would need to be in January 2009-2012 in order to meet the 25 cfs goal. It should be noted that the objective still needs to be met as well. The objective is to reduce the average groundwater use within the corridor and the goals is to stabilize the decreasing trend in streamflow in short-term and long-term.

Changes satisfactory Yes ☐ No, if no, what additional changes are needed?

Delete streamflow projection PART of figure entitled “USGS Zenith gage – January 10-Year Rolling Average.”

Page 12-13 (11-12): Water use in Stream Corridor- added

Note: Water Use values and authorized quantities are an estimate based on the available information that the Kansas Department of Agriculture – Division of Water Resources has. These values could change over time.

Revised information on the reduction goal and average water use: The 12% reduction goal was established in the 2000 Rattlesnake Creek Management Program Proposal and the Partnership agreed to set the goal at 29,284 acre-feet of groundwater use. This goal was calculated based on 72% average water use of the authorized quantity for the corridor. GMD 5 has requested that the Partnership continue to use the goals from the original proposal until the GMD 5 district-wide model is completed (December 2009). The other partners have not objected to this in the stream corridor area. The 10-year rolling average was not met from 2005-2007.

Changes satisfactory ☒ Yes ☐ No, if no, what additional changes are needed?

It was agreed that the 2000 Management Goals will be used until the Groundwater Model is completed.

The Partnership is awaiting GMD5’s response regarding the sentence, “The 10-year rolling average was not met from 2005-2007.” The GMD 5 Board has committed to providing their response on this issue by the end of their meeting on February 19. USFWS found these changes satisfactory. We still need to hear from Water PACK.

Page 14, (12): Updated the Stream Corridor Average Annual Water Use chart to show the original corridor goal and updated the following the paragraph

Ten-year rolling average water use in 2005 was 30,117 acre-feet, 31,141 acre-feet in 2006 and 31,283 acre-feet in 2007. Over the last seven years, the rolling average water use in the stream corridor area has not dropped below the goal. Average actual water use since the base period was 31,033 acre-feet.

Changes satisfactory Yes ☐ No, if no, what additional changes are needed?

The Partners are waiting for GMD5’s statement on this change. The GMD 5 Board has committed to providing their response on this issue by the end of their meeting on

February 19.USFWS found this change satisfactory. We still need to hear from Water PACK.

Page 14, 12-13 (12E): Groundwater Management Area-added in the following and update the average water use information

Note: GMD 5 requested the Partnership use the original goal in the 8-year review. In the original numbers the Mystery River water use was mistakenly included; therefore, the Partnership needs to decide on how to adjust the goal.

From 1987-1996, in Priority Area 5 and the High Decline Area, a 16% reduction in average groundwater use calculates to a goal of 70,532 acre-feet. The 10-year rolling average groundwater use in 2005 was 86,611 acre-feet. It rose to 90,090 acre-feet in 2006 and then increased again to almost 95,000 acre-feet in 2007. In six of the last seven years (86% of the time) the rolling average was above the base period average of 83,967 acre-feet. While all data for 2007 has been compiled, final quality review is still being conducted. Water use for 2008 will not be available until mid 2009.

Changes satisfactory Yes ☒ No, if no, what additional changes are needed?

These numbers will need to be updated to include the Mystery River Area as agreed upon by the Partners in the original management program

Page 15, (13): Updated Figure 8, Groundwater Unit Average Water Use, to include the 10-year rolling average which is how the goal is to be evaluated according to the management program

Changes satisfactory Yes ☒ No, if no, what additional changes are needed?

This chart will be updated to include the Mystery River Area.

Page 16, (13): Priority Area 7 – added the following language and Figure 9 with average annual water use and 10-year rolling average.

Note: In the original plan, this area was called “basinwide.” It included the groundwater rights in the Mineral Intrusion Area and Priority Area 7. Elsewhere in the plan, the Mineral Intrusion area was separated and didn’t have any reduction goals. The Partnership needs to decide whether the Mineral intrusion area should be included in Priority Area 7. This section was NOT updated since December.

Priority Area 7 is located along the southeastern edge of the Rattlesnake Creek Subbasin. The 10-year rolling average water use for this area in 2005 was 44,409 acre-feet. It increased in 2006 and also in 2007 to a total of 46,683 acre-feet. The goal for this area is to achieve an annual groundwater use of 38,847 acre-feet.

Changes satisfactory Yes ☐ No, ☒ if no, what additional changes are needed?

Priority Area 7 (Basinwide) will be updated to include the Mineral Intrusion Area as agreed upon by the Partners in the original management program. Tina recommended adding into the 8-year report how the basinwide water use goals were calculated. Recommendations were similar to the methodology used in the groundwater unit and the stream corridor. This information was not provided in the original management program. Based on calculations by DWR the reduction goal would be 7.5%. This is the average water use goal divided by the average water use.

Page 20-21, (17-18): Voluntary Removal of End guns- revised the third paragraph under 2004-2008

Presently, the GMD #5 is not pursuing an end gun removal program in the Rattlesnake Creek Subbasin; however, the District has obtained information regarding end guns during 2006-2008 individual site inspections. The following table indicates the potential number of end guns removed in the Rattlesnake Creek Subbasin in Edwards, Kiowa and Stafford counties. With 43 total end guns removed, the District estimates potential of 421 acre-feet has been saved (43 end guns * 7 acres/end gun * 1.4 AF of water/acre used). It is unknown at this time whether the end guns on these systems were removed during the review period or if they ever had end guns, thereby truly accruing savings. The Partnership needs to work to determine a method to estimate the savings for end gun removal.

Deleted table 3 and replaced it with a table with list of the file numbers, legal description, and county for possible systems with end gun removed.

Changes satisfactory Yes ☒ No, ☐ if no, what additional changes are needed?

Page 25, (22): Moved Table 4 Caption to above table instead of below

Page 26, (23): Re-typed Caption for Figure 11.

Page 27, (24): Deleted "The following table (Table 5) outlines progress in the Rattlesnake Creek Subbasin from 2000 to 2008". And Deleted Table 5.

Page 28, (24): Re-typed Table 6 Caption & Added sentence under Table 6.

Changes were satisfactory for the pages 25-28.

Page 29, (25): Added Table 7.

Changes satisfactory Yes ☒ No, if no, what additional changes are needed?

Partners did not have ample time to look at this table. However, this table will be updated to reflect today's discussions (using the original 2000 management program numbers). An updated draft will be provided to the partnership for review.

Page 29-30, (25-26): New table 7 Summary of Progress and added in some disclaimers

* Water use goals were established in 2000 with the original management program for groundwater priority areas and are evaluated on the 10-yr rolling averages for groundwater use (Orig goal).
Some of these goals were cooperatively revised in 2004 with the first four-year review but there is no documentation on what was agreed to during the first four-year review. No changes have been made in 2008 for the second four-year review (Revised 4 YR goal), until there is an agreement to the adjusted goals.

** 1987-1996 Averages and Authorized usage were calculated three times to determine changes and for accuracy purposes.
The first time was in 2000 for the original Rattlesnake Creek Management Program (Orig). The second was in 2004 for the first four-year review (4 YR) and the third was in 2008 for the second four-year review (Revised 4 YR).

Changes satisfactory Yes ☒ No, if no, what additional changes are needed?

These disclaimers will be updated to reflect discussions from the partnership meeting.

How would the Partnership like to calculate base period (1986-1997)?

The partnership discussion indicated that the average water use was based on actual water use across the entire basin, which was 72% of the authorized quantity of the entire basin. The authorized quantity was then calculated for each priority area and the 72% was applied to obtain the base period average water use in Table 1 of the original management program. Unless DWR could provide just reason to change this approach they would like to continue with using the 72% of the authorized quantity rather than varying the percentage based on each individual priority areas actual water use.

Mineral Intrusion Area

Should this area be included in water use goals? ☒ Yes No

If yes, which priority area? ☒ PA 7 PA 5/2 MIA

Surface Water Rights

Should they be included in the water use numbers and goals? ☒ Yes ☐ No

GMD5 stated in a letter received by DWR on January 15, 2009 that they would like the surface water rights to be included in the authorized quantities and average water use calculations for the stream corridor. DWR provide the partnership with the number of surface water rights in the corridor and the authorized quantity. Based on DWR analysis surface water rights were not included in 2000 management program. In addition, the program states that the analysis is to be on groundwater use. USFWS believed these were not originally included and agree that they should not be included in the analysis. GMD 5 will review once again and will provide comment after Feb 19 Board Meeting. Water PACK also needs to comment.

Are there any other areas that need to be included in the analysis? Yes ☐ No ☒

Which ones: NA

Are they any other areas that need to excluded in the analysis? Yes ☐ No ☒

Which ones: NA

Original Management Program states to stabilize groundwater levels in high decline areas and in areas outside the groundwater priority areas. (Section B also speaks to high decline areas).

What areas are considered high decline areas?

Priority Area 2

What is considered outside the groundwater priority areas?

Priority Area 5 By stabilizing groundwater levels in this area would provide discharge from the aquifer system to the Rattlesnake Creek and aid in providing a water resource to Quivira

What is your understanding of how the basinwide goals were calculated?

The partnership didn't seem to have a response. Sharon said she would take a look at the numbers and let us know what she figures out.

Who will be signing off on the report?

This was not asked. The Partnership does need to provide this information to DWR.